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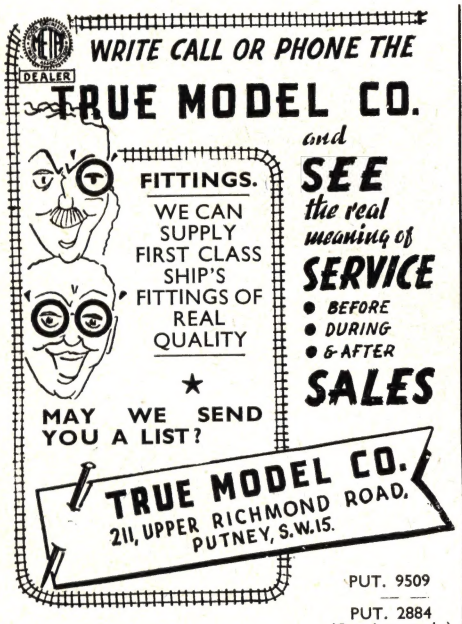


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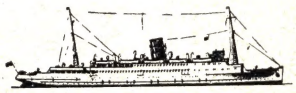

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# Model Ships and Power Boats

INCORPORATING *Ships and Ship Models*

EDITED BY EDWARD BOWNESS

VOL III NO 32 AUGUST 1950

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# *The Ship's Log*

### "THE MODEL ENGINEER" EXHIBITION

This, the outstanding event of the month, is being held at the large New Horticultural Hall, Vincent Square, Westminster, S.W.1, from August 9th-19th. This is undoubtedly *The* exhibition of the year and the ship modeller will find a wealth of interest in the models on view.

### MR. HOWARD I. CHAPELLE

One evening in June during the recent Exhibition by the Society of Marine Artists, at the Kensington Art Gallery, the Guild of Model Shipwrights with members from the various ship model societies in London, foregathered at the invitation of the S.M.A. to be introduced to Mr. Howard I. Chapelle, already well known to most of those present by his books on sailing ships (see p. 117 in this issue for the review of his latest book). Mr. W. Honey, Chairman of the Association of Ship Model Societies, presided, and after a few words of welcome, Mr. Chapelle replied saying how interested he was to find such a keen interest in ship modelling in this country, and how much he was enjoying delving into the wealth of material we had relating to the history of ships. He is over here for six months to gather material for future works from the treasures in our National Maritime Museum, and more especially to study the wonderful series of original drafts of naval ships to be found there.

### A MERRY PARTY

The other evening we were privileged to join in a very interesting dinner party given by Capt. A. G. Course, the author of our latest maritime book *The Wheel's Kick and the Wind's Song* (see review in this issue, p. 117). In addition to various press representatives and others, the party included six elderly ship captains, all of whom had been round the Horn in sail. The dinner was served at the old riverside pub "The Prospect of Whitby," famed for its nautical associations. After the dinner one of the party, Capt. Glasier, C.B.E., Commodore of the Blue Funnel Line, and its associated companies, invited us on board one of his ships lying in the West India Dock. In the beautifully fitted saloon the party was continued until late, and it would need the whole of this issue if we recounted the yarns that were spun. They related to storms and tempests, mutinies, starvation rations, and the experiences of hungry youngsters with autocratic shipmasters, and also to the gaieties of life in port. But with all the hardships there was the feeling that they were good times to look back on.

### OUR COVER PICTURE

This month we have used a photograph of a sailing model of the *Cutty Sark*, another of the fleet of sailing ship models built by the Rt. Hon. Mr. Justice Oliver, M.C., in the years before the war, and referred to in the series by Graham Henley describing his model *Thermopylae*. She is sailing in the sea off the South Coast, near Rye, and under the gentle breeze is carrying all her sail, even to skysails and stunsails. The beautiful line of her stern and the graceful proportions of her tall sail plan are clearly seen in the photograph. The model is to the scale of ¼ in.-1 ft., which gives a length of 53 in. between perpendiculars. The rigging is quite suggestive of the rigging of the original ship but has been modified somewhat for convenience of handling when sailing.

# *MODEL MARINE POWER PLANTS

*by Edgar T. Westbury*

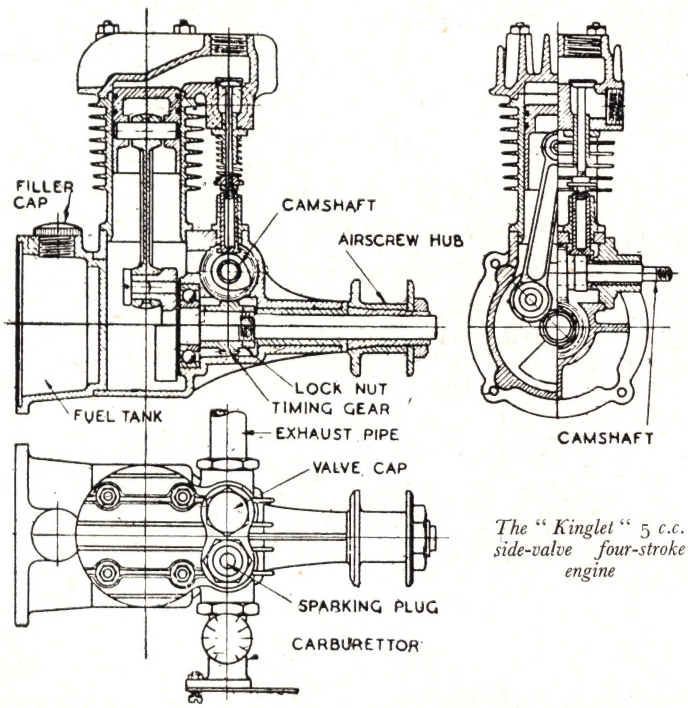
ALTHOUGH it may be desirable to revert to the subject of model steam plants later, it is proposed to leave them for the present, to discuss the use of internal combustion engines for model boat propulsion. A great many queries have been received on this particular subject, particularly in respect of applying the commercially-produced compression-ignition and glow-plug engines which are readily available at the present time, to various types of speed or prototype craft.

Let it be said at the outset that there is no question of the suitability of any of the well-known makes of these engines to propel any type of craft efficiently. In all cases they have an extremely high power-weight ratio, and a tiny i.c. engine weighing a few ounces may produce as much useful tractive effort as a steam or electric plant weighing as many pounds. They are obviously best suited to the propulsion of light, fast craft, and racing boats in particular. When applied to heavier and slower craft, their utility value remains, but sheer efficiency is the least important factor in such cases, and they are often quite out of character for such craft, besides being much less controllable than steam plants, and also subject to other objections.

I have on several occasions been asked to advise readers as to the "most efficient" or "most reliable" engine for use in a model boat, but most readers will appreciate that it would be very indiscreet for me to attempt to make comparisons of this nature ; and in any case, any generalities are liable to be inaccurate and possibly misleading. All the reputable makes can be relied upon to give good results if properly used, and personally I would not like to have to make distinctions between them. Most of the troubles which users encounter with such engines are due to their lack of knowledge on how to handle them, or carelessness in the matter of adjustment, selection of fuel, or other causes which are definitely the responsibility of the user.

Some extremely high performances have been attained with engines of 2 c.c., or even less, in racing craft, and there is now an established racing class for engines up to a capacity limit of 5 c.c., officially recognised by the M.P.B.A. Some of the boats in this class have achieved speeds little inferior to those attained in the larger classes. But on the whole, it is far more difficult to get really good and consistent results with very small engines ; the fact that they are continually on their tip-toes, so to speak, makes them susceptible to the slightest falling-off in form, and moreover, very small, light boats are bound to be much more at the mercy of wind and weather than those of sturdier construction. I have always advised beginners to gain experience with boats of reasonable size and engines of a fair capacity, and all the brilliant successes of the " mosquito craft " have not yet caused me to change my views.

There is, I feel, little point in giving any detailed particulars of ready-made i.c. engines in this series of articles ; many of my readers, especially those of the younger generation, will already be quite familiar with all the popular makes, and so far as their running and handling is concerned, may have had far more experience than I have myself. Their adaptation to marine work is quite simple, and differs in no essential respects from that of other forms of engines, but i.c. engines of any kind have much less latitude in respect of speed and torque than steam engines or electric motors, and call for careful selection of the size and pitch of the propeller to obtain the best results. The higher the speed and performance of the engine, the more critical these factors become, and they naturally reach their highest importance in racing craft.




*The " Kinglet " 5 c.c. side-valve four-stroke engine*

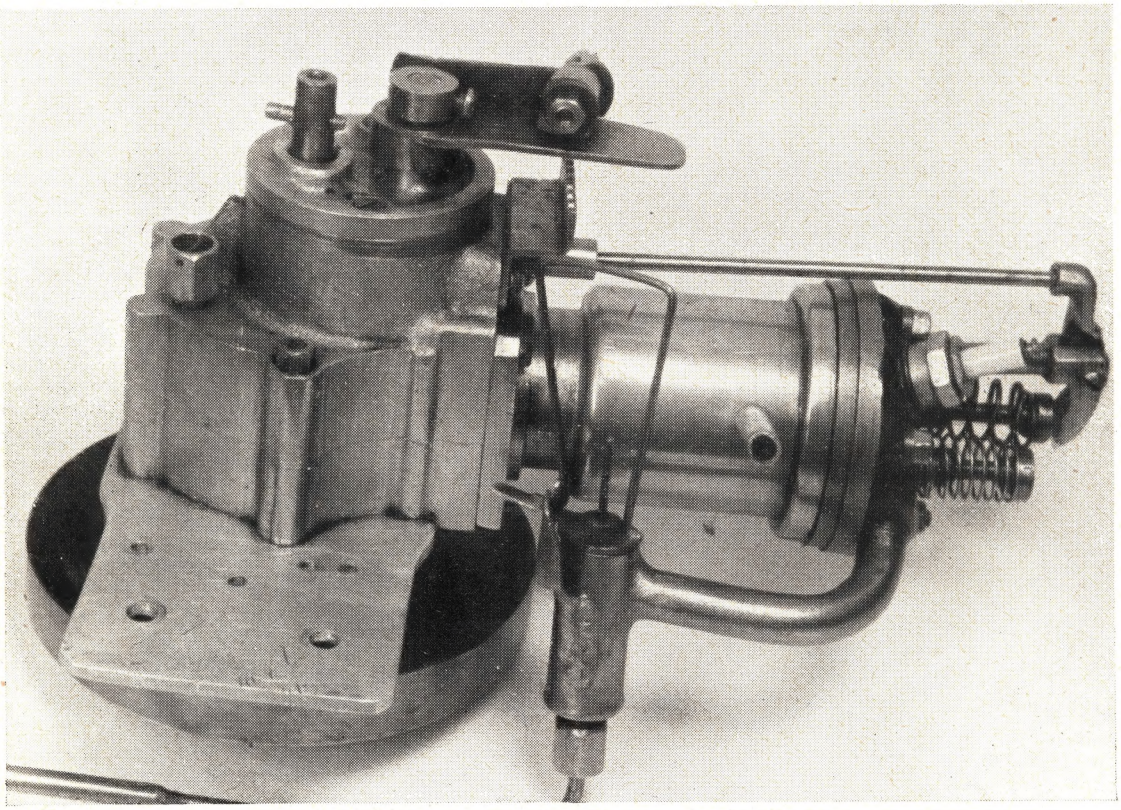
* *Continued from July issue, page 84.*

Apart from sheer utility performance, little has been done to produce i.c. engines of a really suitable type for prototype boats. The small, high-revving high-compression engine is not the ideal type for this purpose, and for many types of craft, it would be extremely desirable to have a comparatively slow-running and quiet engine capable of a good range of control, but manufacturers have not given this aspect of the matter attention so far, and in fairness to them it may be said that it is doubtful whether the demand for such engines would justify the attempt to cater for the particular market. It is therefore up to the individual constructor to produce his own engine if he wishes to have a power plant in keeping with real marine practice, but this aspect of design has been sadly neglected in modern times.

Many of the home-built engines fitted to prototype boats started their career with the intention of being racing engines, but having failed to attain the required standard of performance for such work, were relegated to the more modest task of propelling a cruiser or a tug, with or without detuning or more extensive modification. This can hardly be regarded as a satisfactory state of affairs, but it is true to say that comparatively few attempts have been made in recent years to design engines suitable for prototype boats, and even those intended definitely for moderate performance have generally followed closely on the lines of racing design. In these respects, the engines which were built over 40 years ago by the pioneers of model power boating were really better suited, in power characteristics if not in design, to general marine work than the majority of modern engines.

Some of the pioneers mentioned in the articles on the history of model power boats, published two years ago in this journal, built engines which, though heavy and clumsy according to modern standards, were flexible and reliable to a remarkable degree, and moreover, some of them are still running as well as ever today. It will be appreciated that an engine intended to work at low speeds must necessarily be of large capacity for the power it develops, but that is not necessarily a disadvantage in prototype boats, where no capacity limitation rules are observed.

In the early days, the size and weight of petrol engines usually precluded the fitting of them vertically in the hull, and direct coupling to the propeller shaft was the exception rather than the rule. The Arkell Brothers, in their famous *Moraimas I* and *II*, laid the engine horizontally with the crankshaft athwartships, and used chain or spur gear drive to a bevel gearbox at the after end of the boat. A more common arrangement was the horizontal engine with vertical crankshaft, having a bevel gear at the bottom end, meshing with a similar gear on the propeller shaft. This system is still used by several of the old school,

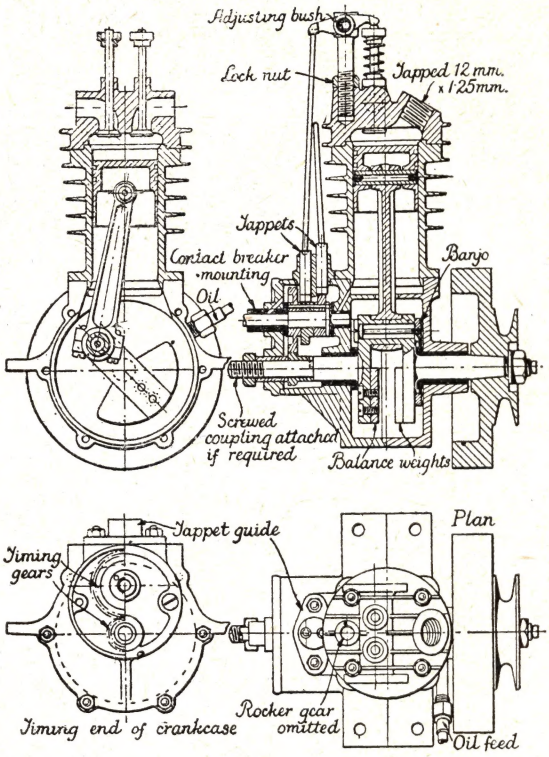


*A water-cooled horizontal boat engine built by Mr. E. W. Vanner*

including Mr. E. W. Vanner, and is by no means to be despised by modern designers. It enables the entire plant to be stowed below decks, even in a shallow draught boat, and produces a very low centre of gravity, which is conducive to stability. This has a very important influence on the seaworthiness of the boat, and its ability to hold a true course. The fact that gearing is used to drive the propeller enables some choice of speed ratio to be obtained, and the most efficient propeller size and pitch for the particular class of craft thereby to be selected.

The more modern development of engine design, however, has produced smaller and lighter engines which are suitable for direct coupling to the propeller shaft, without taking up too much head room or raising the centre of gravity to an undesirable extent. Although such engines must necessarily run at much higher speeds to produce the same power as the larger slow-speed engines, they can still keep within manageable limits, and can be designed to give a fairly wide range of speed control. If it is considered essential to run the propeller at slow speed, a simple spur-geared reduction gearbox may be installed, though few of the users of such engines find it necessary to use a gearbox unless it is desired to drive twin screws.

Several of the engines which I have designed in the past, while not specifically intended for the propulsion of prototype boats, have been used for this purpose very successfully, and can be recommended to the constructor who wishes to build a reliable utility engine. For reasons which will be discussed later, the four-stroke engine is favoured by the majority of experienced model power boat enthusiasts, and although there is more work in it

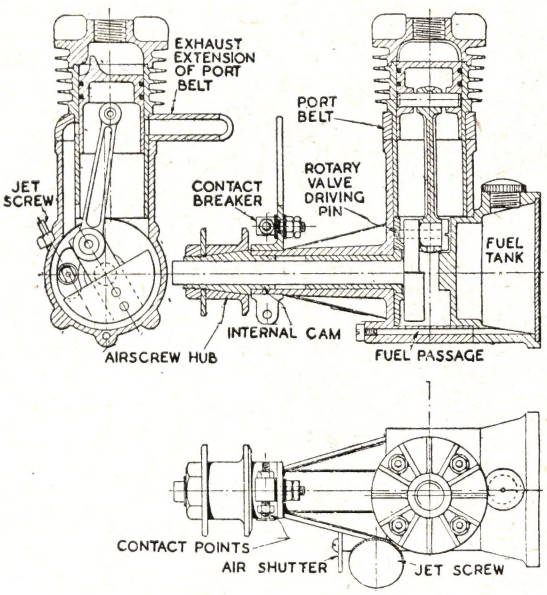



*The "Kiwi" 15 c.c. o.h.v. four-stroke engine*

than the two-stroke, its components are quite straightforward to produce, and work reliably if carefully made. Among the engines of this type, the most popular is the "Kiwi" of 15 c.c., but for those who prefer a smaller engine, the side-valve "Kinglet" 5 c.c. engine is equally reliable, and has unusual flexibility.

But the most popular of all my designs, which has been used with equal success in all fields of powered models, is the "Kestrel" 5 c.c. two-stroke, and although it has a narrower speed range than the four-strokes, it has been applied to prototype boats of all kinds, by constructors who were first attracted by the simplicity of its construction. A similar but more modern design is the "Cadet" 5 c.c. engine, and a slightly larger and more "woolly" engine is the "Atom Minor" Mark III.

None of these designs is represented as an ideal marine type; from the aspect of characteristic appearance they are all wrong, but they are mentioned as examples of straightforward "utility" designs which will serve their practical purpose. If constructors wish to build engines which look and behave like real marine engines, there are other designs available, but these are necessarily of more elaborate construction, and can hardly be recommended as exercises for the raw beginner.




*The "Kestrel" 5 c.c. two-stroke engine*

*(To be continued)*

# "THE MODEL ENGINEER" EXHIBITION, 1950

AS has been the case for the last few years, the Ship Model Section this year promises to be one of the largest, if not the largest, in the exhibition. From a study of the entry forms, and from what we know of the work of the makers of some of the models being entered, there will be some notable models on view. Among the historical ships we are promised a $\frac{1}{8}$ in. scale model of H.M.S. *Prince*, of 1807. This is a popular prototype for model makers, but in this case, judging from the photograph reproduced on this page, we have a really outstanding model. The builder, Rear-Admiral Blackman, D.S.O., of Ashton, Hants, has made an exhaustive study of his subject and has built a very lovely model. The Birmingham Ship Model Society is sending as its entry for the Club Team Cup a 1/12 in. scale model of H.M.S. *Victory*, by Mr. F. A. A. Pariser, a $\frac{3}{16}$ in. scale model of the U.S. brig *Pilgrim*, by C. J. Clarke, and a $\frac{1}{8}$ in. scale model of a 12-gun brig of 1840, by Mr. A. E. James.

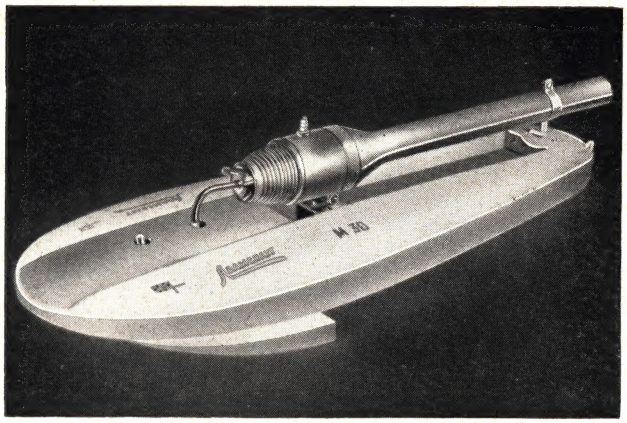
Probably the most notable of the models of the later sailing ships is that of the clipper *Thermopylae*, by Mr. I. W. Marsh, of Barry Dock, South Wales. The intricate detail work on this model must be seen to be believed, and it is certain to win widespread attention and admiration.

Also among the sailing ships we have six models of four-mast barques, namely, the White Star barque *California*, the skysail yarder *Queen Margaret*, the *Grenada* by Captain A. Thompson, Master of the M.V. *Donacilla*, and three models of the *Archibald Russell*. In addition there is a model of the ship *Loch Sunart*, by Mr. Murray, of Weybridge, who also sends a model of the four-mast topsail schooner *Juan Sebastian de Elcarno*. An interesting entry is the $\frac{1}{4}$-in. scale model of *Thermopylae*, which is being described at present in our magazine. We understand from Mr. Henley that, owing to hard sailing, he is carrying out extensive repairs to his spars and rigging, and will thus be unable to exhibit the model fully rigged. We will, however, be interested to see the hull, especially as it is planked on frames.

So far modern naval ships are conspicuous by their absence, which seems a pity, as, owing to rapid developments in the technique of modern warfare, the ships are undergoing a similar rapid development, and the types which were used in the last war are fast disappearing. We have, however, some fine models of merchant ships, including a 6 ft. model of the motor ship *Angola*, and a 3 ft. model of the *Penang*. Mr. Knapp, of Leigh-on-Sea is sending his working model of a cargo liner which is 55 in. long by 7 in. beam. We like to see working models of prototypes as, in addition to looking like the original, they have also to be seaworthy, and in short to resemble the prototype in both performance and appearance. Mr. E. N. Taylor, whose work we have seen and admired at previous exhibitions, is sending a model of the M.V. *Gartwood*, and also one of the trawler *Milford Viscount*, which went missing recently in the North Atlantic. He is also sending a panel type case with models showing the midship sections of ship hulls during the last 50 years, which should be of considerable interest. Mr. McNarry's model this year is a full-hull model of R.M.S. *Caronia*, which should be worthy of careful inspection. We are pleased to note that Mrs. McNarry is also sending a model this year, the subject being the paddle steamer *Great Western*, of 1837.

There are a number of models of smaller craft, including drifters, cabin cruisers, tugs and a naval pinnace. An interesting model should be the steam yacht *Iolaire*, of the 1900 period, with the graceful lines which were a feature of this type, this by Dr. T. Fletcher, of Colne, winner of the Steamship Cup in the last two exhibitions. Another interesting model is the *Severn Trow*, by A. J. Kirby, of Mitcham, Surrey. And as the type has now completely vanished, it will be interesting to see a model of one. There are a number of yachts and some ships in bottles. The tendency nowadays seems to be to use electric light bulbs rather than whisky bottles. Perhaps they are more easily obtained.

There is a good selection of miniature models, among those to the scale of 100 ft.-1 in. is a model of S.S. *Marwa*, a Brocklebank cargo liner by Mr. Greenham, of the Bristol Ship Model Society, and a model of T.S.S. *Canton*, by Mr. J. L. Bowen, of Manor Park, E.12. We have a half-model this year, which has been sent in by Mr. K. N. Harris, of Wealdstone, Middx., and represents a 20 ft. hard chine motor sailer.



# *EXPERIMENTS WITH MODEL HYDROPLANES

*by*

H. A. ADAM

HOWEVER, to continue with my own experiments. I was able to obtain from the States a Redhead Dynajet unit, and for my purpose I do not think there is a more suitable power unit. Its essential simplicity, its complete immunity from damage in spite of repeated duckings, and its relatively easy handling, free one from all engine difficulties, and enable full concentration to be given to the subject in hand. See photograph above.

I think probably most readers know the details of the Dynajet unit, so all I need say is that it is a 22 in. pulse jet, working at a pulse or explosion rate of 280 cycles per second, and giving a constant thrust of 4½ lb. Apart from its characteristic "bellow" which has been greatly exaggerated, but does rather prohibit its use in built-up areas, it is a docile and trouble-free method of propelling model hydroplanes.

In order to get accustomed to handling the Dynajet, I installed it in the V-bottomed speedboat which had given 38 m.p.h. with the McCoy engine, and with the kind permission of Messrs. Wilmot Mansour & Co ran the model tethered in their new 50-yd. circular tank.

This hull proved almost unmanageable, being too small and light, running up to a speed of about 45 m.p.h. and then continuing at this speed, porpoising violently, and ending with the boat digging in its nose and overturning in a flurry of steam.

I had in the meantime built a 30 in. Ventnor type hydroplane similar to the hull with which I had obtained 66 m.p.h. with the McCoy engine. I first ran this at the Lymington Model Engineering Society's regatta, and among the interested spectators was Col. C. E. Bowden who had also had some experience with the Dynajet, and with his aid managed to get over some starting difficulties I was experiencing through faulty installation. I had fitted the boat with two retracting underwater fins, as I intended running the boat free as well as tethered, and as these would not be required when running tethered I had coupled them with the attachment points of the boat, so that as soon as the boat tightened on the line both fins are drawn into slots. I found that this so helps launching fast tethered boats that a brief description may be of interest to others.

It consists of what, in effect, is a small centreboard such as is used in a dinghy, mounted on a swivel in a watertight casing built into the hull. It is free to swivel backwards into its watertight box, and is held in the down position by a spring, or rubber band. The swivel or axle, to which it is fixed, passes through the sides of the cases, and is connected by lever and links to the attachment points of the boat. These are allowed just sufficient movement to retract the fin completely when tension is applied. See below.

In operation the boat is launched with the tethering line just slack permitting it to drag in the water. As the boat is released its initial progress is governed by the extended fin or fins, and when the line tightens these are retracted, and normal tethered performance is permitted.

However, to return to the first run at Lymington. The boat got away smoothly, and after a quarter of a lap was running with the line fully extended.

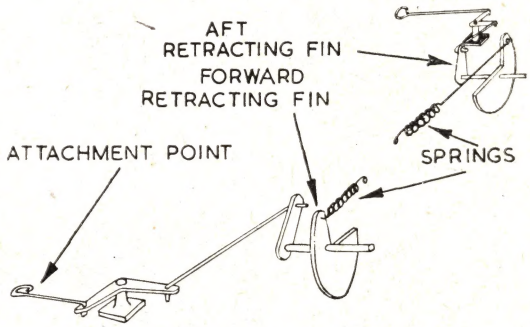



*Fig. 3. Connections for operating retractable fins.*

Accelerating rapidly, it had just completed a little over a lap when it took off and executed a perfect loop of about 12 ft. diameter. The jet cut out at the top of the loop and it landed perfectly, the boat completed half a lap before stopping. Before carrying out any alterations this performance was repeated while Col. Bowden endeavoured to get a picture of

*Continued from July issue, page 86

the boat actually in the loop. By raising the thrust line, and bringing the centre of gravity forward the performance was improved considerably, and in the next set of runs at Lymington I managed to complete two and a half laps before the inevitable

*Mr. Adam and his jet hydroplane at speed*

take-off, and a timed speed of 6 sec. for the two laps of 50 yards, a mean speed from standing start over 100 yards of 50 ft. per sec. or approximately 33.77 m.p.h. Thus velocity at end of

$$\text{run} = \frac{2 \times \textit{distance}}{\textit{time}} = \frac{2 \times 100 \times 3}{6} = 100 \text{ ft./sec.}$$

which is 68.25 m.p.h.

This acceleration seemed to be very good so I decided to try the boat running free over my 352 ft. course. I had added considerable weight to the bows to bring the c.g. forward and could have raised the thrust line, but with the low freeboard felt that this might lead to nosing over at the launch. I made three runs before timing the boat, and the acceleration and speed to the point where she took off seemed terrific, each run lasting about 20 ft. or 30 ft. beyond the 352 markers, when the boat, rising like a plane to about 12 ft. before the jet cut out, turned over and dived to the bottom.

Having borrowed three stop watches I then timed the boat on a further three runs, the average time for the 352 ft. being five seconds. This represents 70.625 ft. per sec. or approximately 47½ m.p.h. as the mean speed from standstill to 352 ft.

It would follow from this that the maximum velocity reached in this distance $= \frac{2 \times 352}{5} = 140$ ft./sec. which is $\frac{140.8}{88} \times 60 = 96$ m.p.h. This I felt was a very encouraging figure, and with the conclusions I had arrived at through carrying out these trials, decided to build two entirely new boats, one for the Dynajet, and the other for the McCoy engine, the latter to have a fully submerged propeller. Both boats are to be 35 in. long with a beam of 12 in., and both will be conventional hydroplanes with V forward sections. Construction will be straightforward consisting of $\frac{1}{8}$ in. plywood frames, fitted to a $\frac{1}{8}$ in. plywood keel which is provided with $\frac{1}{8}$ in. plywood " false rebates " to which the planking will be attached. Planking will be double diagonal 1/32 in. = $\frac{1}{4}$ in. plywood strips on the forward V sections, and $\frac{1}{16}$ in. sheet aft. The whole of the upper " turtle " decking will be double diagonal 1/32 in. plywood strips. See below.

In the McCoy engined boat, I propose to install the engine well aft, and take the drive forward to a two-to-one ratio gearbox, which will transmit through a shaft emerging from the after end of the step. This will permit me to try out my theories on submerged propellers, driven at slower speeds than the modern high revving two-strokes will allow. I have found in full size practice that this " speed-gear," as the Americans call it, definitely improves a boat's performance, particularly in rough or broken water.

The only difficulty I can see, at the present stage, is the increase in propeller torque making straight running a little tricky, but this will add to the fun.

The Dynajet-driven boat will have fewer problems, and it only remains to be seen whether I can keep it on the water at the speeds the jet unit is capable of giving the boat.

Both boats will have retractable fins, so that I can also use them tethered, and it will be interesting to see whether it is possible to operate inherently stable hulls on the line with any degree of success.

Both these boats are only at the drawing-board stage at the moment, and it will be a few months before I can continue with what I find to be absorbing experiments.

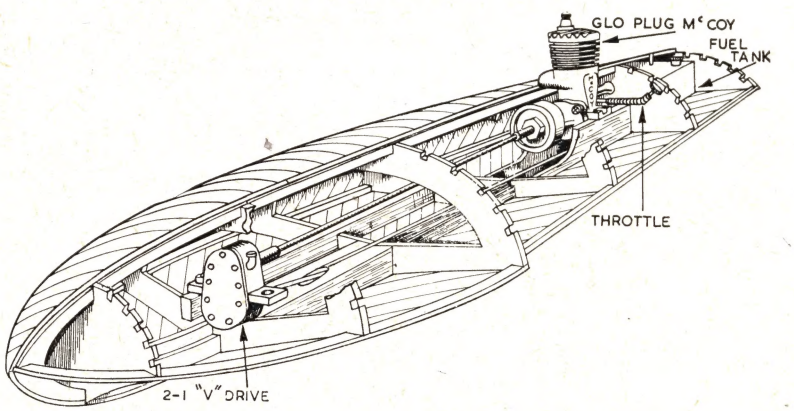



*Fig. 4. Proposed 35 in. hydroplane showing engine installation*

# *HINTS ON MODEL YACHT SAILING

(*PART II*)

by

F. C. TANSLEY

*Commodore, Hove and Brighton Model Yacht Club*

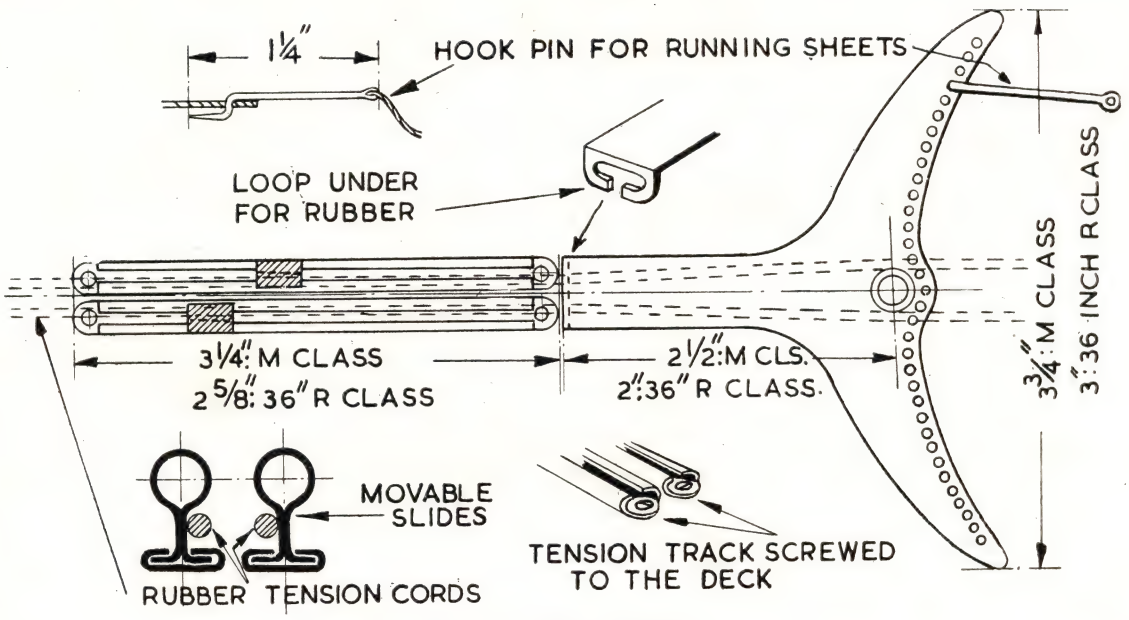
AS soon as the student has learned how to sail his model reliably close-hauled against the wind, he should direct his attention to sailing with the wind abeam. To steer a sailing model across the wind directly to her destination in any weather is the most difficult of a skipper's tasks—more so than in the case of a full-sized yacht which has a steersman sitting at the helm. Sheets should now be eased, and the rudder must be brought into use. At this time we have two opposing forces very evidently in play—firstly, the wind action on the two sails, and the varying water-pressure along the lee-bow and the leading edge of the fin tending to bring the boat nearer the wind; and, secondly, the controlled action of the rudder which resists this tendency by directing the boat's course away from the wind. On a " reaching " course the wind comes more or less over the weather bow or from aft over the weather quarter, and you are said to be " close " or " broad " reaching. There may be a " soldier's wind " with a steady breeze coming exactly across the boat so that after the correct trim has been discovered she will travel up and down the lake without readjustment; schooners and ketches can do this kind of routine very successfully, and may then beat racing cutters.

For reaching with wind abeam, therefore, we loosen the sheets of both jib and mainsail and bring the Braine rudder system of steering into action by unhooking the " beating " sheet from the after-horse so that the main-boom running-lines, which lead to the rudder, are left free and can control the lively efforts of the boat to leave the true path. A short-keeled sailing yacht does not naturally move in a straight line, but in a curve directed towards and eventually into the wind's eye—and this is where a helmsman's keen and methodical observation will yield good results.

Never forget the obvious—that the wind force on the sails provides the directional as well as the propulsive urge to the course of the boat; it is evident, therefore, that the booms of the sails must be set at the most appropriate angle to the central fore and aft line of the hull. For elementary trial in along-wind reaching, place your boat in the water so that the wind blows squarely across the hull and arrange the sheets so loosely that the sails tend to " lift " and " spill " the wind ; now pull in the jib sheet gradually until you can feel a constant and definite sideways pressure, so likewise for the main sheet; next, for experiment, lock the rudder so that the under-water blade of it is absolutely central, and let the boat go—you will find that her course is erratic and usually she luffs round into the wind; nothing but the counteracting use of the rudder-blade to intercept the stream of water rushing along the lee of the fin and hull can compel her to keep a straight and satisfactory course.

It is now for us to consider in detail the action of the " Braine " rudder control. Mr. George Braine was a well-known London model yachtsman; he was a clever skipper, and a most skilled builder of models, many of which are still in existence; he told me that once, while he was in a Tube railway train pondering over the causes of and cure for recent defeats resulting from bad steering, particularly down wind, he hit upon the simple but fundamental idea of crossing the main steering lines abaft the deck-blocks and leading them to a rudder head or quadrant so as to give reverse and variable pulls on the rudder tiller; this new method made obsolete for racing and cruising purposes the old systems of steering by means of lead-weighted swinging rudders or rack-controlled " fixed " rudders. Study the appended sketch of a "Braine" rudder and gear. The " Braine " system allows three principal adjustments by means of (1) A T-shaped rudder head; (2) rubber cords with variable tension; (3) movable twin slides limiting the swing of the tiller, with the addition if desired of an across-deck pin-rack for the same purpose.

*(*Continued from July issue, page* 95)




*Details of Braine steering gear*

(1) The rudder quadrant has a series of holes made as closely together as possible outwards from the rudder post. Into these holes are fastened the special hooks at the ends of the two sheets leading from the main boom, and also those from the jib boom when required. The leverage of the pull of the sheets on the rudder varies in strength according to the distance of the hooks from the centre.

(2) The tension of the rubber cords is changed by moving at one or the other end a slide-bowsie running along a cord to give a stronger or weaker pull, and consequent recoil or centring effects—in light winds weak tension is the rule, in hard winds greater tension must be given so that the under water blade is not pulled over too easily and so held unduly to leeward.

(3) Two movable metal slides run along little tracks parallel with and close up to the rubber cords : they supplement the rubber cords and limit the angle to which the tiller can be pulled—if the slides are set well away from the end of the tiller then the pull can be wide and easy ; if the slides are close up to the end of the tiller the blade's movement is barely perceptible. By the way, Mr. Braine advocated that the rubber should be left free and not fixed centrally for close hauled windward work when beating sheet replaces the running lines. Double, or twin slides should be used to allow of unequal settings on different tacks or gybes.

Now for sailing, and the mastery of the secrets of the rudder. The best way to achieve success in sailing across the wind is to steer the boat methodically always from the same starting point, first gently with say two holes of rudder, slides 1 in. from the tiller end, and the tension of rubber just sufficient to centre the rudder blade. Next, keep on adding holes of rudder, and watch results on the direction of the boat's course. Next vary the slides without altering the number of holes. Similarly alter the strength of the tension alone and observe results. Continue quietly with such experiments and you will acquire experience and confidence.

For sailing close to the wind, full and bye, but something less than tightly close hauled as for tacking to windward, it is usual to make use of only one or two holes of rudder, with slides close to the tiller because the hardening-in of the mainsail results in a quick luffing tendency, especially in squally weather, and the action of the rudder counteracts this. The jib running lines can be used in the same way to give a gentler form of control, which is sometimes better than flattening-in the jib unduly to make it a pressing sail. For sailing full and free with the wind coming over the beam (as the three yachts are doing in the photograph) give more holes up to 3, 4, or even 5, and set the slides farther from the tiller. In very calm weather the rubber tension can be almost nil. With the modern short-keeled boats the use of jib steering lines on either a close reach or on an ordinary free reach is rather a double-edged subtlety and may lead to wandering away from the wind, but in down wind sailing the use of jib-steering can be most useful.

Always the aim on all courses should be to control the direction of the boat, firstly, by a suitable free and natural setting of jib and mainsail so as to yield the greatest speed along the wind and, secondly, by a mild use of the rudder as a corrective to the strength of the wind puffs. Beginners usually haul their sheets too closely, and try to correct the resultant vagaries in direction by harsh and over-emphasised use of the rudder—this is bound to cause trouble because mechanical forces are set in opposition violently and can no longer co-operate as is necessary.

(*To be continued*)

# *THERMOPYLAE

## *A Sailing Model Clipper Ship* — *by Graham Henley*

WITH the model now the right way up, four central pillars were placed to prevent hogging or sagging, screwed to the floor and to beams, which were cut from oak scrap and screwed in place across the elm ribs after checking the beam measurements. The temporary pine ribs being removed, it was found that the rib section adjacent to the break of the poop had sprung a trifle outwards ; this contretemps, however, was dealt with, by applying a tourniquet over the hull at this "station," twisting until this trifle was reduced sufficiently for an oak beam of the correct dimensions to be firmly screwed across these two ribs. A central pillar was also inserted at this beam, which with the others gave box bracing rigidity throughout the length of the hull.

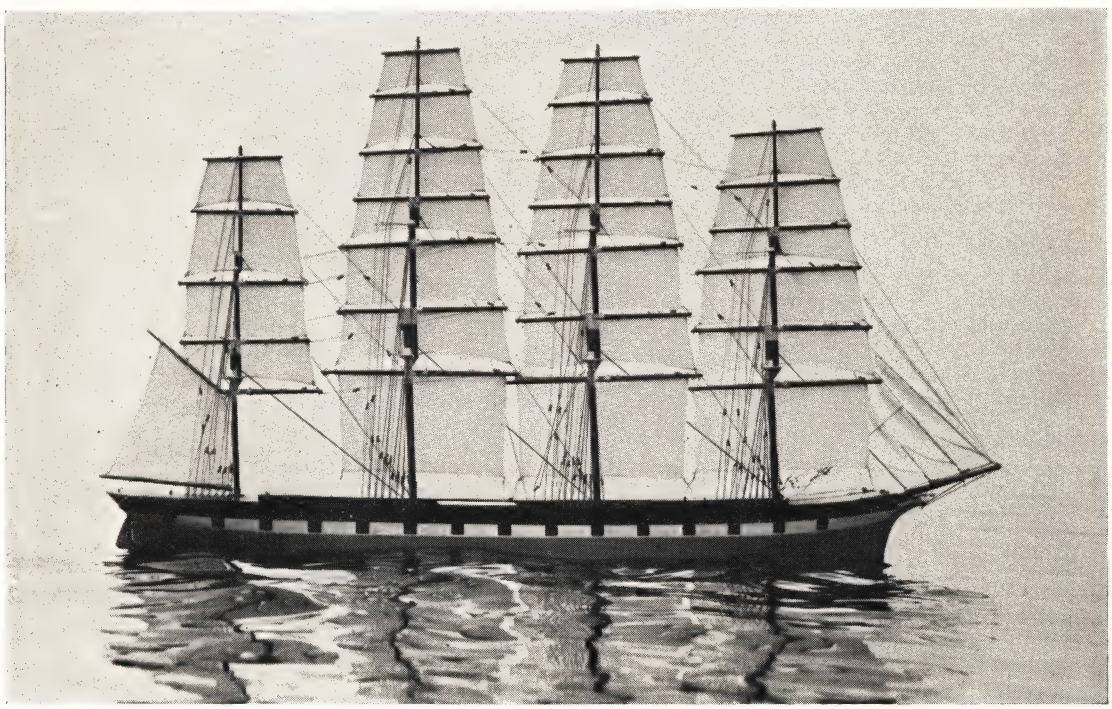
All the beams were slightly cambered on their upper surfaces before fixing in position, and filling pieces of pine glued and brass screwed, from stem to stern, were fitted between the ribs, being slotted over the bent timbers to form the bed for the port and starboard sides of the deck (see Fig. 6 in July issue).

Three ply was cut to shape for bulwarks, from a cardboard pattern, and the projecting ends of the ribs were sawn off at an angle to form the bulwark stanchions. These will be removed altogether in time, and correct stanchions fitted.

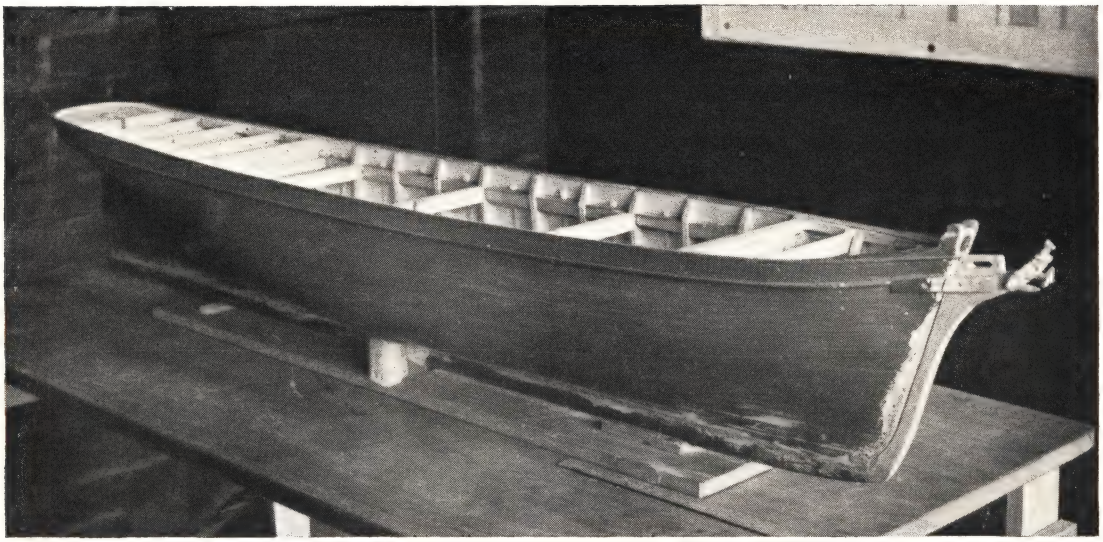
The forecastle, poop and main decks were cut by paper pattern from a $\frac{1}{8}$ in. slice off a discarded teak notice board, and lines, $\frac{1}{8}$ in. apart, imitating deck planking, scribed on each. The spaces left between each stanchion, after dropping the main deck in place, were filled with pieces of teak, glued and nailed. A capping rail was nailed down on to the tops of the elm ribs cut for stanchions, with the $\frac{1}{2}$ in. copper brads, in one length each side from stem to the turn of the counter, where a horse shoe sawn out from $\frac{1}{8}$ in. teak completed the job. The capping rail was $\frac{1}{4}$ in. by $\frac{1}{8}$ in. strip bought in bundles from a Hobbies shop. (See Fig. 6.)

Three openings were cut in the main deck. Commencing abaft the foremast a rectangular hole was cut, $5\frac{1}{2}$ in. by 2 in., which was surrounded with a coaming $\frac{1}{2}$ in. high and $\frac{1}{4}$ in. thick, over which fitted the deckhouse, removable for inspection of the interior. Next came the main hatch, 4 in. by $2\frac{1}{4}$ in., with a $\frac{3}{8}$ in. coaming, a space large enough to put a hand through, for carrying the model at the point

*(*Continued from July issue, page* 93)



*Mr. Justice Oliver's beautiful model of the four-mast ship "Wendur"*



*Hull of " Thermopylae " showing the ribs and bent timbers*

of balance ; and aft of the mainmast a smaller hatch 3 in. by $1\frac{7}{8}$ in., just forward of the break of the poop, more nearly to scale than the mainhatch. On the poop deck which is $15\frac{1}{4}$ in. long, a coach top cabin with half rounded sides cut to follow the deck outline, was built up on a wooden frame with a $\frac{1}{8}$ in. teak deck to form a sufficiently stout support for the mizzen mast. One of Lubbock's books said that *Thermopylae* had " an ugly half round coach topped cabin " on the poop, and ugly it is, but unfortunately no other details are available. As for the forecastle, catheads, cut from teak strip, were fitted, after the deck had been screwed in position.

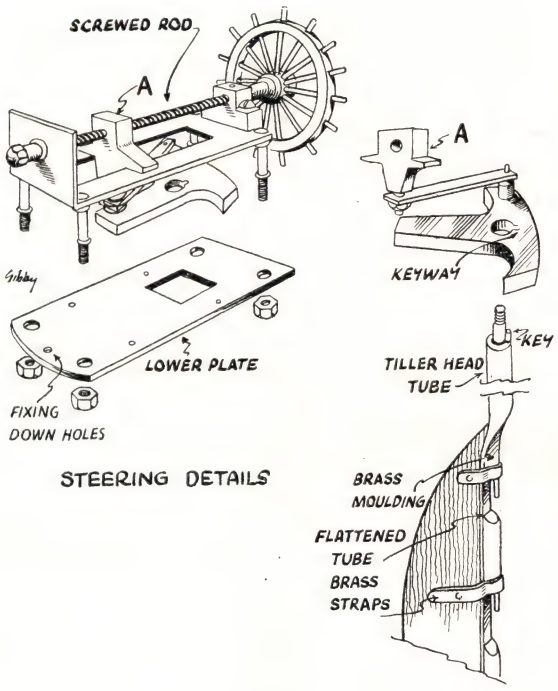
The sheer plan (page 70, June issue) shows the clipper bow stem-piece with the figurehead as a plain block, and this piece was accordingly traced direct on to a piece of oak and hand sawn across the grain, leaving a little extra bulk for the figurehead to be carved from, with the grain running with the figure. Carving the figurehead out of the stem piece itself ensured the reproduction of the graceful sweep of *Thermopylae's* beautiful clipper bow. The part of the stem below the figurehead covered the ends of the planks nailed to the stem fashion piece and was faired off to make a sharp entrance.

A figurehead cut out and stuck on afterwards might not have reproduced the sweep and would always have been a weakness. Carving the piece was carried out with a small sharp pocket knife, commencing with the helmet and head of Leonidas, a Grecian warrior, after a careful study of pictures and a statue in the museum. The arms were cut out separately and glued and screwed through the shoulders to the body. The left arm supported a circular shield and the right a short broad sword, but this was sheer enthusiasm and imagination on my part. The sharpened end of a bradawl, slightly gouge shaped, was used to dig the breast to simulate the scalloped edges of breast armour. The edge of a folded piece of fine sandpaper was used to soften the knife cuts and heighten the grim warrior expression of *Thermopylae's* figurehead, a matter of high cheek-bones and suggestion of moustache and pointed beard. Below the waist the figure ends in an armoured kilt, which garment was simulated by vertical cuts, radiating slightly from each other. The head and arms were painted white, the armour gilded. The knees, fitted each side of the stem, were cut from pine, in two pieces a side as the complicated angles can only be guessed at. (See Fig. 2 and photograph on page 92 in July issue.) I have since read in Dr. Longridge's wonderful *Cutty Sark* book that he used this method for his model. The fore ends of the knees were fined away to nothing where they met the figure's kilt, each knee sweeping slightly downwards in a hollow curve aft. The half round moulding on the sheer line was now continued along the uppermost edge of each knee, with a piece of strip, well boiled before being pinned in place, to take the inward and upward curves which end at the figure's waist. Moulding was pinned also to the lower edge, ending slightly forward of a point below the catheads. Headrails were fitted in a rudimentary form . . . a piece of cedar each side from the hair of the figurehead curving slightly inwards and downwards, ending forward of the catheads, between the capping rail and the moulding, on the sheer line. To support the bowsprit at the correct " steve " a piece of hard wood was screwed to the top of the stem piece in the angle formed with the knightheads, and through a hole in this piece passed the gammoning when the bowsprit was lashed hard down with rigging cord soaked in oil. The head rails were strengthened athwartships with two stays each to this centre piece. (See Figs. 2 and 5 in July issue.)

*Thermopylae's* small rudder (see Fig. 7) was built up on a length of copper tube $\frac{5}{16}$ in. diameter, long enough to reach from above the poop deck to

the bottom of the keel. The lower part of the tube below the trunk hole, was flattened and screwed to a wedge shaped oak rudder, the fined-off after part being to allow the parted water to meet again without too much drag. A false rudder post was placed over the plank ends at the stern (see Fig. 3, July issue) and on this were fitted four pintles, brass strip with sockets made of very small copper tube, the gudgeon pins attached to the rudder being similar with the addition of brass pins soldered in the sockets, to engage in the pintles. A bend had to be made in the copper tube where it passed through the counter, to bring its centre in line with the gudgeon pins. The leading edge of the rudder had faired off filler pieces soldered in place between the gudgeon pins with suitable spaces left so that the rudder could be lifted, and removed.

The steering gear fitted to *Thermopylae* was a simplification of the gear employed on *Cutty Sark* and many other clippers of that period. The tiller head




STEERING DETAILS

*Fig.* 7.

tube had a short threaded brass rod sweated into it, and on this, secured with a nut and small key, a T-shaped piece of brass, with the stem of the T, the tiller, pointing aft. This was positioned to move just clear of the deck, and the port arm pierced to take a small upright arm secured with a tiny nut. Swivelling on top of this arm, a short brass link connected it to the underneath of a brass nut on a fore and aft positioned brass threaded rod. Rotating the rod caused the nut to move backwards or forwards, operating the link attached to the arm of the tiller, so moving the rudder. The brass threaded rod was housed in a shallow brass box, outside the fore end of which was the steering wheel, the box being mounted on four legs clearing the T-piece. The wheel had a small slot in its hub engaging with a steel key made from a small piece cut off a twist drill, to prevent the holding nut from becoming unscrewed when the wheel was rotated. The wheel was made up from two thin slices off a brass tube, between which brass wire spokes were laid to a centre hub of two small electrical washers. The whole assembly was nailed on a board to keep in position whilst ribbon solder was run into the hub and round the rim, cleaning up finally with a rat-tail file.

The rudder trunk hole was bored with a brace and long bit, through the mitred planking by the stern rudder post. A copper washer was shaped to fit the point of exit, and nailed in position with copper brads.

11 lb. of scrap lead and other oddments were now melted and poured into a wooden trough 4/5 in. wide and 4 ft. 1 in. long. When cold, this bar of lead was treated to a good rasping, and then countersunk holes were bored for the brass screws holding the lead to the inner keel, along which a thin layer of red lead was spread, the ship being upside down once more. The lead was then planed along its bottom edge with a small plane.

The weight required to sink the ship to her marks was found by placing a jug on her deck as she floated in " dry dock," the bath filled to the brim, with the overflow covered with plasticene. Water was poured into the jug until the ship had sunk to the approximate position of her load water line. The jug of water was then weighed on the bathroom scales.

This crude performance resulted, surprisingly enough, in the ship being correctly ballasted for her very powerful sail area, a point watched with some anxiety when she was launched. The weight required corresponding to the jug of water (being in addition to the bar lead keel already fitted) was supplied by a removable streamlined lead bulb of 16½ lb., with one holding bolt through brass lugs cast in it, which fitted each side of the bar keel, gripped by tightening the holding bolt through the bar keel. Smaller lugs at each end of the bulb rest on the sides of the keel, but are not necessary. This bulbous sailing keel was cast for me, as time pressed.

The only change made since was to elongate the holding bolt hole, so that the bulb keel could be slung ¼ in. farther aft, to trim the ship minutely by the stern, as I have read some of the crack China Clipper captains did with their sensitive and responsive charges by using a shifting box filled with scrap iron.

(*To be continued*)

## *ERRATA*

We must apologise for the following errors which appeared in our July issue.

Page 85 the author's name should be H. A. Adam.

Page 86 caption for the photograph should be " Ventnor type hydroplane with Mills engine."

Pages 94-5 captions should be transferred.

# SHIPS IN THE NEWS

*by Laurence Dunn*

PETROIL

THE 4,634 ton Israeli-owned, Panamanian registered tanker *Petroil* has just been declared a constructive total loss after being beached on fire near Sete. The fact that she is not worth repairing is not surprising as she is 47 years old and thus one of the world's oldest tankers, also one of the few surviving to have machinery amidships.

She was built as the *Pennoil*, by the Grangemouth and Greenock Dockyard Co. Ltd., and fitted with triple expansion engines by David Rowan. A 9-knotter of 6,775 tons d.w., she had a length of 365 ft., and was 50 ft. in breadth—in fact, a typical tanker of that period, though probably better looking than most.

She was later well known on the Atlantic as the Vacuum Oil Co's. *Gargoyle* and then as the *Oswego* of the Union Petroleum S.S. Co., Inc., of New York. The only other unit in this latter fleet was the 5,088-ton tanker *Westwego*, a rather odd looking ship which had been built in Germany for Rumanian owners.

In 1932 both were transferred to the newly formed Irish American Oil Co. Ltd., of Dublin, an offshoot of the Anglo American Oil Co. Ltd., and were the first ocean going tankers owned in Eire. The *Oswego* then became the *Queen Maeve* and the other the *Queen Tailte*. These two ships—the only ones ever owned by the company—wore a black house-funnel encircled with a green band on which were painted the orange letters I-A.

In the early 'thirties they were both sold, the *Queen Maeve* going to Greece, the traditional home of dry cargo ships but not of oil tankers, and she had the distinction of being the only tanker under that flag.

Under Israeli ownership too she has been something of a novelty for the same reason.

* * *

PATHFINDER

One of the most noteworthy cargo ships built in Britain for some years has recently run trials.

She is the single screw bulk ore-carrier *Pathfinder*, the first of a pair built by Hawthorn Leslie's for the Pan Ore S.S. Co. Inc., of Panama City.

She is to be followed later by her sister ship the *Prospector*, now completing.

The owners are a subsidiary of the giant Aluminium Co., of America, and when the order was placed it caused considerable satisfaction here, it being the first time for many years that Britain has been commissioned to build for the States.

The two ships, which are of approximately 6,500 tons gross, can lift some 7,500 tons of ore and are powered by single Doxford type motors. They are 447 ft. in overall length by 60.2 ft. breadth and 27.2 ft. depth.

The *Pathfinder* has an unusual appearance with one exceptionally long well deck between the 100 ft. long poop and the 37 ft. forecastle.

The stern is raked and the stem is of slim cruiser type. On the forecastle is a short twin mast carrying a single topmast. The bare well deck—devoid of bulwarks—has one small and five long hatches and between each is a short upright for lifting the steel hatch covers.

The superstructure on the poop is two decks high and is surmounted by a bridge, tall mainmast and wide funnel with a slanting top, the whole effect looking very un-British!

* * *

LIGURIA

How many once well-known liners may still be found in service operating under the Panamanian flag?

Mostly they are owned by single ship companies whose names effectively cloak the identity of the real owner, who in almost every instance hails from one of the Mediterranean countries.

The ex-Burns Philp liner *Marella* is such a ship. A twin screw passenger vessel of 7,475 tons, she was built in 1914 as the *Hilda Woermann* with extensive and luxurious passenger accommodation, soon renamed *Wahehe* by her owners, the Woermann Line; she was surrendered after the first war and was temporarily managed by the Shaw Saville & Albion Line. Later in the 'twenties Burns Philp bought her for their Australian-Singapore run where she quickly made a great reputation for herself. After years of successful service she was out-moded by new tonnage and she was accordingly sold two years ago to the Cia de Nav. Baru, Soc. Anon, of Panama, a single ship company who renamed her *Captain Marcos*. As this she was still seen in Far Eastern waters, but as a visitor not from Australia, but from the Mediterranean. Now the same firm has given her the more dignified name of *Liguria* prior to using her on the Atlantic, where she is scheduled to make three voyages carrying pilgrims from New York to Europe.

* * *

TUDOR STAR

After 31 years under Blue Star Line colours, the

(*Continued on page* 115)

# MODELLING MODERN WARSHIPS

## *Some aspects of characterisation*

*by A. R. FINCH*

THE modelling of warships has always been a relatively complicated procedure, by virtue of the numerous details that lack uniformity, though they are possibly not unduly complicated in themselves. In contrast, the deceptive simplicity of the large liner is created by a multiplicity of similar components, notably boats, davits and windows.

During the course of the recent war, a decided change crept over the appearance of warships (quite apart from bizarre colour schemes and " crabfat,") a change, moreover, to the disadvantage of the earnest modeller, putting an ever higher premium on his capacity for meticulous detail.

*H.M.S. " Duke of York " showing bridge superstructure, dual purpose H.A. guns and port crane (stowed) and other details*

As the creation of character is a *sine qua non* of good modelling, it is essential that this change must be appreciated if fidelity is to be achieved.

This article does not suggest the technique to be employed. That is left to better and more inventive craftsmen than the writer. The aim is to focus attention on the salient differences in the appearance of the warship of 1949 from that of 1939. These differences may be summarised as principally (1) masts (2) radar arrays, (3) light A.A. armament.

The most notable mast changes are in destroyers and one or two categories of small vessels. The modeller can no longer get away with a simple pole, but must now contrive the lattice affair which is an essential feature in the whole appearance of the ship. In cruisers, the pole mast has again been replaced, in this case by a tripod, which does not present undue difficulty.

The foregoing leads logically to (2) as the new masts have been developed to cope with the ever increasing radar arrays " bowl fires," spikes and whip aerials (which sprout also from funnels and superstructure) and the trussed yards and brackets which carry this gear.

Also belonging to this category are the radar fittings prominent on gun houses and directors. In the latter connection, the glazed bowl-like fittings in the Battle and Weapon classes of destroyers are particularly characteristic. The point of all this is that some representation of this equipment must be made if the model is not to look rather naked and out of character.

Light A.A. armament (3) is found everywhere in capital ships and cruisers, and the very quantity of it has a profound effect on the appearance of the ship. Again, it is essential to achieve some representation of these weapons.

A last prominent feature may perhaps be mentioned. This is the air-stream deflectors of varying intricacy which adorn various positions in the modern warship, notably on upper bridges of cruisers. The webbing supporting these deflectors is complex in detail and it exercises a tremendous effect on the general appearance of the upperworks, especially as it is usually combined in British cruisers with an impressive battery of Carley floats each side of the bridge structure.

The photographs illustrating these notes give an adequate expression of most of the foregoing matter. Only in two ways does the new look offer some little solace to the modeller. On some large ships, notably American, boats appear to have been largely eliminated. Secondly, the tendency to suppress scuttles may be observed, presumably as an aid to damage control.

It may be observed that scuttles, with their eyebrow-like rigols, are highly characteristic of the warships of most nations and must not on any account be omited from models larger than a scale of 50 ft. to 1 in. A proved and successful method of treating scuttles and rigols may perhaps be of

*Dutch cruiser " Jacob Van Heemskerck " 4,150 tons showing details of bridge and mast*

*Dutch destroyer " Piet Hein " 1,796 tons at Rotterdam showing davits, Carley floats and lattice mast*

interest as a conclusion to these notes. I make free acknowledgment to that master of models, Norman Ough, for this technique and have employed it myself with success.

If the hull is plated with paper, the scuttles can be punched in with a punch made up to suitable diameter. For the rigols, a piece of suitable wire (fuse wire) is wound round a mandrel of appropriate diameter in the form of a close wound spring. The mandrel is withdrawn and the spring snipped longitudinally with scissors.

This leaves the modeller with a collection of split circles, which, on a piece of steel-plate or glass may be cut into semi-circles with a knife. These are picked up one by one with tweezers, dipped into dilute seccotine and applied over the scuttle holes. Painting the hull completes the effect nicely. Not quite as tedious as it sounds !

## SHIPS IN THE NEWS

(*Continued from page* 113)

S.S. *Tudor Star*, 7,199 tons, has been sold to Dutch shipbreakers and will be scrapped at Hendrik-Ido-Ambacht.

The second oldest ship in the fleet, she was built by Lithgows Ltd., Port Glasgow, as the *Empirestar* (later modified to *Empire Star*) and was a flush decker, 423 ft. in length.

Of shelter deck type, she had a d.w.c. of 9,200 tons and triple expansion engines which gave her a speed of 11 knots.

She was an " odd " ship in the fleet, in that she had no sister ships, although she looked remarkably similar to the smaller *Viking Star*.

She was given her final name in 1935 to leave that of *Empire Star* free for one of the new motor liners, then building for the company, a ship which later became a war loss.

The third *Empire Star* started life as the *Empire Mercia* and is a four-year-old Harland and Wolff-built motor vessel of 11,861 tons.

# *PROBLEMS IN SHIP MODELLING* PART I

*by Stuart E. Beck*

DURING the construction of a small waterline model Thames river tug, several little problems cropped up. The writer's solution of these may interest readers who have encountered similar difficulties, and have not solved them satisfactorily.

The methods described are not claimed to be the best, however, nor the results perfect, because each individual modeller has his own style of working out details of this kind. The model is to a scale of approximately 1 in. to 12 ft., which makes her length 6½ in.

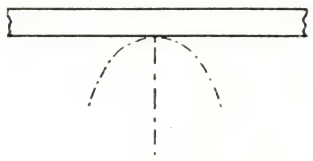


*Fig.* 1

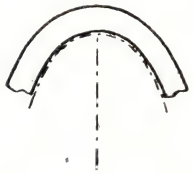


*Fig.* 2

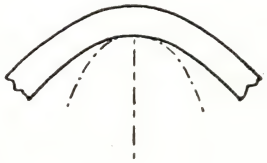


*Fig.* 3

**Problem No. 1—Bulwarks**

It was decided to have a shot at making these of Bristol board, in one piece, the only join being at the stem.

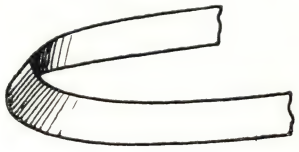


*Fig.* 4

The bulwark tumblehome angle at the centre line of the counter is about 45 deg. Now, if the bulwark round the stern were vertical the strip of board required for this part would be straight. (Fig. 1.)

On the other hand, a strip to fit round the counter but lying flat in the horizontal plane would have to

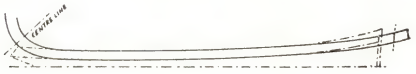


*Fig.* 5

follow the arc of the counter on the deck plan. (Fig. 2.) For a tumblehome of 45 deg., therefore, a shape about midway between these two is the one we want. (Fig. 3.) Just to make sure, this was tested by a rough trial strip. (Fig. 4.) There is little sheer on the hull until well forward, where the deck line rises fairly sharply.

The shape for the counter having been decided, the lines were transferred to tracing paper. The tracing was laid over the profile drawing of the ship and the lines extended forward, following the sheer, until the turn of the bows.

Here extra length must be allowed, of course, for the curve into the stem. But as the strip end at the stem end must not rise higher than shown on the profile, the shape must gradually drop a little below the sheer line. This should be understood by reference to the diagram. (Fig. 5.)

The curves were now complete for one side. It only remained to fold the tracing along the centre line, trace over for the other side, and transfer the completed drawing to a sheet of board.

A reduced sketch (Fig. 6) shows the whole strip. Do not forget to cut wash ports, etc., before fitting,

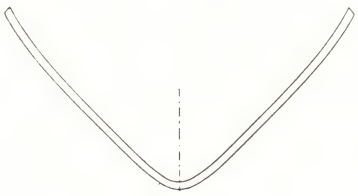


*Fig.* 6

as this operation is more difficult after the bulwarks are in place.

The lower edge of the strip lies in a small rabbet and the join is covered by the rubbing band.

A point to remember, which does not show on the diagrams, is that the strip widens slightly as its angle departs from the perpendicular round the stern. This is to keep its height constant.

(*To be continued*)

## *TRADE TOPIC*

J. CHAPPELL, of Weaste, Salford, has sent us his new list of ship modelling materials and fittings. It is most comprehensive and will solve practically any problem the modeller may have in connection with his supplies. The many items include designs, kits, fittings of standard and super grades, wood (obechi, spruce, birch and ply), sails, engines, propellers, and tools. All types of models are provided for. The price of the list is 9d., and it is exceedingly good value.

# FOR THE BOOKSHELF

## THE HISTORY OF THE AMERICAN SAILING NAVY

By HOWARD I. CHAPELLE.

*English Publishers, Allen and Unwin Ltd., 40, Museum Street, London, W.C.1. 84s. net. Crown Quarto, 558 pages.*

Those of our readers who are already familiar with Howard Chapelle's *History of American Sailing Ships* will be eager to see his latest book, *The History of the American Sailing Navy*. The style of the wonderfully accurate and detailed drawings of the older book is once again a feature of the new book. There are more than 200 valuable drawings of sailing ships of all types from the largest ships of the line, 74-gun ships, frigates, sloops, brigs and schooners, down to the smallest cutters and ships' boats. They include hull lines and drafts, spar plans, sail plans, guns and gun carriages, and, in fact, everything necessary for making models of all types. The author has in every case gone to the original drafts, some of which are reproduced direct from the original in half tone. In many cases, however, the originals were too frayed or dilapidated to photograph successfully, and the author has carefully redrawn these. The drafts of the larger ships are reproduced on double page folding plates, quite large enough and clear enough to be enlarged for model-making. So far we have made no reference to the text. This is quite on a par with the drawings. Commencing with the earliest ships, built in the States when they were still under British rule, the author traces the development of the ship through the War of Independence down to the middle of the last century, when sail was replaced by steam. Not only are the ships dealt with but the various influences, both personal and political, which moulded the American Navy, are discussed in the author's painstaking and exhaustive manner. The book makes fascinating reading and the information about the various ships will give added interest to anyone making a model of them. Apart from the model-making interest the book will be valuable to marine artists and also to anyone interested in the history of shipping. To overcome the difficulty of ordering the book from the States, Messrs. Allen and Unwin Ltd., have secured a limited edition for sale in this country at a somewhat more favourable price than would be paid by ordering direct from the States. By so doing they have performed a real service to the British ship modelling fraternity. The book is strongly bound and beautifully produced in the best style of the American publishers, W. W. Norton & Co., Inc., New York, and would be a worthy addition to any ship modeller's library.

* * *

## THE WHEEL'S KICK AND THE WIND'S SONG

By CAPT. A. G. COURSE

*Percival Marshall & Co. Ltd., London. 18s. Demy 8vo, 264 pages, illustrated.*

Here is a book which will appeal to every lover of the sea. From cover to cover it is alive with yarns from one who has lived them and is at the same time a master in the art of relating them; yarns sometimes tragic, sometimes exciting, sometimes amusing, but always interesting. The author is now Master of one of London's largest docks and is well known as a lecturer on seafaring. His skill as a raconteur is reflected in his writing. Much of the subject matter is autobiographical and the remainder has been gathered at first hand from his old ship-mates. It deals almost entirely with life on the square riggers and makes particular reference to the ships owned by John Stewart & Co., London, the owners of Britain's last fleet of square rigged ships and in which line the author served. The last one was the *William Mitchell*, which was broken up in 1928, and she was the last full rigged ship to be owned by a British company. Stories of several other well known ships are included in the book among them the famous clipper *Corialanus*, the barque *Edinburgh*, notable as being one of the very few three-mast barques to carry skysails on fore and main, and the well known *Monkbarns*, one of the most popular of London's square riggers. The book is well illustrated, the half-tone plates showing some of the ships referred to in the text as well as scenes of life on board ship. Each chapter heading has a pen-and-ink sketch of the ship in the particular chapter, drawn by Mr. E. W. H. West, who served many years in the ships of the Stewart Company. The book is introduced by a foreword from the pen of Alan Villiers and concludes with a table of all the ships of the John Stewart fleet with their dates, tonnages, and body dimensions. It is a book which will be an inspiration to ship modellers and will be enjoyed by all lovers of ships and the sea.

# News from the Clubs

### THE MODEL POWER BOAT ASSOCIATION

The M.P.B.A. Grand Regatta will be held on Sunday, August 20th, at the Boating Lake, Victoria Park, London, E. The Regatta will commence at 11 a.m. sharp and intending competitors are asked to co-operate by arriving early due to the heavy programme.

The events will be run in the following order :—

1. Nomination Race.
2. C class (Restricted) for E.D. Trophy
3. B class for Mears Trophy.
4. C class for the Victory Cup.
5. Steering Competition for M.P.B.A. Steering Cup.
6. A class Speed Championship Cup.
7. Prototype Competition for Prototype Cup.
8. Crebbin Trophy for fastest flash steamer.

Attention is drawn to Rule 5 of Competition Rules concerning registration numbers on boats. Temporary markings may be used if it is not convenient to make them permanent. Hon. Sec. J. H. BENSON, 25, St. John's Road, Sidcup, Kent. Tel. : Footscray 7428.

### THE MODEL YACHTING ASSOCIATION

*British (M.Y.A.) Open Championships*, 1950

August 12th.—W. Bay Pond, Saltcoats. 12 metres.
August 28th-September 1st.—Fleetwood. 10 raters.
September 16th, 17th.—The Lagoon, Hove, Marbleheads.

*Other Events*

*Club Open Races*

August 6th.—M. Hove.
,, 7th.—A. Gosport.
,, 19th.—M. Birmingham.
September 9th.—A. Greenock.
,, 9th.—A. Gosport.
,, 10th.—10r. Bolton.
,, 10th.—10r. Wicksteed.
,, 15th.—10r. Paignton.
,, 17th.—A. Y.M. 6m. O.A.
,, 24th.—36 in. Fleetwood.

Any further particulars can be obtained from the Hon. Sec., C. R. Seabrooke, 29, Tresham Avenue, Hackney, E.9.

### INTERNATIONAL RADIO CONTROLLED MODELS SOCIETY

At the recent annual general meeting, the word "International" was added to the society's name. Already the society has members in various parts of the world and one overseas affiliated club, and it is hoped to form more overseas groups in the future. *The Daily Dispatch* International Radio Controlled Model Boats Contest, postponed at Easter owing to the bad weather, is to be held at Fleetwood, on August 5th, 6th and 7th, in conjunction with model power boat and model yacht events organised by the Northern Association of Model Engineers and the Fleetwood Model Yacht and Power Boat Club.

The new hon. sec. of the society is T. F. Sutton, The Lodge, Manchester Grammar School, Manchester, 13.

### BROMLEY MINIATURE POWER BOAT CLUB

This club was formed in October, 1949, and has, as its president, His Worship the Mayor of Bromley. Meetings are held at the boating pool, Whitehall Recreation Ground, Bromley, on Sunday and Thursday evenings. At present the membership list is closed, but anyone in the district wishing to have a run on their line is welcome, provided that their boat meets with the club's very strict rule on efficient silencing of all i.c. or flash steam engines. Further particulars can be obtained from the hon. sec., G. O. Caird, 26, Blackbrook Lane, Bickley, Kent.

### SOUTHGATE M.Y. CLUB

On Sunday, June 11th, the first contest between this club and Danson M.Y. Club was held at Southgate. In perfect weather conditions the visiting team soon got accustomed to their new surroundings, and finally beat the home team by 46 points to 37. After lunch an open competition was held, in which the winning boat, D. Barber's *May* (Southgate), gained 22 points. At the tea which concluded the day's sport, Mr. W. Gill, vice-president of the Southgate club, welcomed the visitors, and expressed the hope that further contests between them would be possible. Any further information required could be obtained from the Hon. Sec., H. Death, 8, Rowantree Road, Winchmore Hill, N.21.

### TYNEMOUTH M.Y. CLUB

Forthcoming events:

August 12th.—Invitation Day. Clubs from Hartlepools, Heaton and Sunderland will compete.
August 27th.—Criterion Cup. Speed.
September 3rd.—Donkin Cup. Sailing.
,, 17th.—Morrison Cup. Sailing.

The sailing water, which is at Tynemouth Park, is available for competitions from 10.30 a.m., except on August 12th, when the competition will commence at 1.0 p.m.

### EXETER M.Y. CLUB

Fixtures for August are as follows :—

August 6th, 7th, 13th and 20th.—Various competitions between the boats, both power and sail, on the water each day.

August 27th.—10 rater Interclub Event, with the Paignton and District Model Yacht Club as the visitors.

A general meeting will be held on August 14th at the Emanuel Hall, Okehampton Street, at 7.30 p.m.

# Editor's Correspondence

DEAR SIR:

A bit of news for you. As a result of approaches made by Birmingham Ship Model Society, the Committee of the Birmingham Museum and Art Gallery (who have inspected some of our models) have approved in principle the suggestion that a shipping and maritime section should be included in the proposed new Birmingham Science and Industrial Museum and the newly appointed keeper has been instructed to allocate space for this purpose immediately premises have been acquired.

Yours faithfully,

Walsall. A. E. FIELD

Editor's Note. *Owing to shortage of space further correspondence must be held over until next month.*

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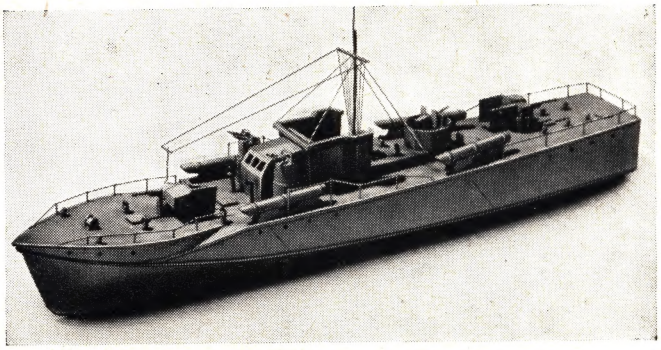

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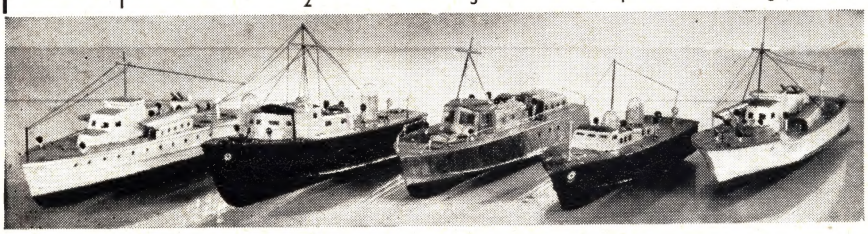

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The Editor invites correspondence and original contributions on all subjects connected with model ships and power boats, which should be addressed to him at 23, Great Queen Street, London, W.C.2. Matter intended for publication should be clearly written, and should always bear the sender's name and address.

All correspondence relating to sales of the paper should be addressed to THE SALES MANAGER and correspondence relating to display advertisements to THE ADVERTISEMENT MANAGER.


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The sailing ship still has a great attraction for most of us, and as it is now almost impossible to see one on the sea or in port, the next best thing is to make a model. The object of this book is to enable the would-be constructor to make a model which will be a correct copy of a fine example of the type, and which will recapture at least some of the grace and beauty of the original. The drawings are made from the builders' drawings of the actual vessel and the data embodied in the book was verified by the author during a series of visits to the ship while she was still in the Australian Grain trade.

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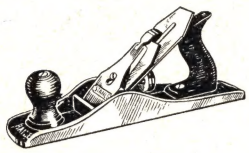

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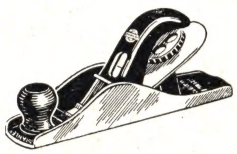

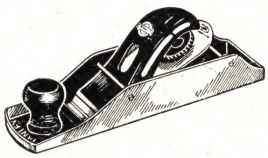

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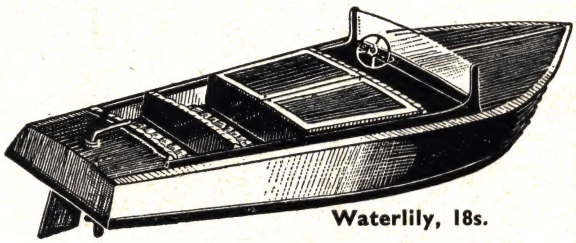
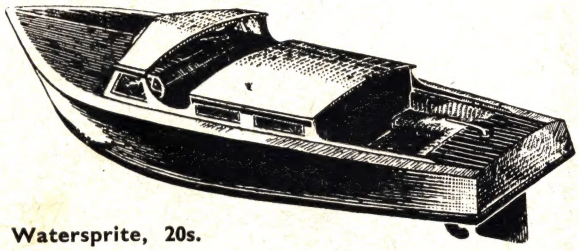
THESE KITS ARE ABSOLUTELY COMPLETE with all necessary sheet wood for hull sides and deck, keel cut to size and drilled for propeller assembly, complete rudder and propeller assemblies, dummy steering wheel, celluloid, sandpaper, glue, full-sized plan and building instructions.



**Waterlily, 18s.**



**Watersprite, 20s.**

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